

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

JILL STEIN, et al.,	:	
Plaintiffs,	:	
v.	:	Civ. No. 16-6287
:		
PEDRO A. CORTÉS,	:	
<i>in his official capacity as Secretary of the</i>	:	
<i>Commonwealth of Pennsylvania, et al.,</i>	:	
Defendants.	:	
:		

Diamond, J.

December 12, 2016

M E M O R A N D U M

Unsuccessful Green Party Candidate Jill Stein and Pennsylvania voter Randall Reitz allege that because Pennsylvania's voting machines might have been "hacked" during last month's election, I must order the Commonwealth to conduct a recount of the votes cast for President. There are at least six separate grounds requiring me to deny Plaintiffs' Motion. Most importantly, there is no credible evidence that any "hack" occurred, and compelling evidence that Pennsylvania's voting system was not in any way compromised. Moreover, Plaintiffs' lack of standing, the likely absence of federal jurisdiction, and Plaintiffs' unexplained, highly prejudicial delay in seeking a recount are all fatal to their claims for immediate relief. Further, Plaintiffs have not met any of the requirements for the issuance of a mandatory emergency injunction. Finally, granting the relief Plaintiffs seek would make it impossible for the Commonwealth to certify its Presidential Electors by December 13 (as required by federal law), thus inexcusably disenfranchising some six million Pennsylvania voters. For all these reasons, I am compelled to refuse Plaintiffs' request for injunctive relief.

I. Background

On November 8, 2016, the United States conducted its Presidential Election. The reported vote shows that Republican Candidate Donald J. Trump was elected President. See Donald Trump Elected President of the United States, Associated Press (Nov. 9, 2016, 2:29 a.m.), <http://elections.ap.org/content/donald-trump-elected-president-united-states-0>. Although Pennsylvania has not yet certified its results, the reported popular vote indicates the following: Mr. Trump (2,970,764 votes); Secretary Hillary Clinton (2,926,457 votes); Governor Gary Johnson (146,709 votes); Dr. Stein (49,947 votes); and Mr. Darrell Castle (21,569 votes). See Unofficial Returns, Pa. Dep’t of State, <http://www.electionreturns.pa.gov> (last visited Dec. 12, 2016). Pennsylvania has not yet certified its election results. (See Hr’g Tr. 90:1-9, 121:20-22.)

Pennsylvania has opted into the federal “safe harbor” that allows it to determine conclusively its Presidential Electors through state procedures. See 3 U.S.C. § 5; 25 P.S. § 3192. The safe harbor requires Pennsylvania to make a final determination of its Electors at least six days before the Electoral College meets. See 3 U.S.C. § 5. The Electoral College will meet on Monday, December 19, 2016. See id. § 7. Pennsylvania thus must certify its election results tomorrow to retain its right to make the final determination of its Electors. See Bush v. Gore, 531 U.S. 98, 111 (2000) (per curiam).

Some three weeks after Election Day, Dr. Stein initiated efforts to seek a recount of votes cast for President in Pennsylvania, Michigan, and Wisconsin, the three states in which Mr. Trump prevailed by the narrowest margins. E.g., Stein v. Thomas, No. 16-14233 (E.D. Mich. 2016); Great Am. PAC v. Wis. Election Comm’n, No. 16-795 (W.D. Wis. 2016); In re The Matter of the 2016 Presidential Election, No. 569 MD 2016 (Pa. Commw. Ct. 2016); Stein v. Phila. Cty. Bd. of Elections, No. 161103335 (Pa. C.P. Phila. Cty. 2016); see Recount2016,

Jill2016, <https://jillstein.nationbuilder.com/recount> (last visited Dec. 12, 2016); see also Pennsylvania Recount, Jill2016 (last visited Dec. 12, 2016), <http://www.jill2016.com/recountpainfo> (In Pennsylvania, “[t]he campaign has mobilized over 2,000 concerned voters in more than 300 election districts in some 20 counties to request recounts”).

Only 0.82% of Pennsylvania voters cast their ballots for Dr. Stein, who does not allege that a recount might change the election results. See Unofficial Returns, supra. Indeed, she reportedly has denied that she seeks to change the results. Rather, she reportedly has said that her efforts are intended to ensure that every vote counts. See Jill Stein, Why the Recount Matters: Jill Stein, USA TODAY (Dec. 1, 2016, 3:56 p.m.), <http://www.usatoday.com/story/opinion/2016/12/01/election-recount-voter-registration-hacking-jill-stein/94631360>.

Dr. Stein has challenged the integrity of the Pennsylvania election results. As alleged, during the November 8 election, the Commonwealth allowed its citizens to cast votes on Direct Recording Electronic (DRE) machines, and used optical-scan machines to tabulate paper ballots. Fifty-four Pennsylvania Counties used one of six DRE machine models. (See Defs.’ Resp. Ex. D-1, Doc No. 42-1.) Seventeen Counties used paper ballots that were then counted using optical-scan machines. (See id.) Four Counties used both DRE and optical-scan machines. (See id.) Plaintiffs—both here and in a multitude of Pennsylvania State Courts and Election Boards—have alleged that because these machines might be vulnerable to hacking and cyberattacks, Plaintiffs must be permitted to conduct a forensic analysis of the machines. (See, e.g., Compl. ¶¶ 1-5, Doc. No. 1 (“A majority of machines voted for Donald Trump in Pennsylvania. But who did the people vote for? Absent this Court’s intervention, Pennsylvanians will never know that truth.”).) With Dr. Stein’s financial, legal, and organizational support, Pennsylvania voters have

pursued these claims in judicial and administrative proceedings across the Commonwealth. (See Maazel Decl. Exs. 1-13, 16, 21-22, 24-37, Doc. Nos. 9-1 to 9-13, 9-16, 9-21 to 9-22, 9-24 to 9-40.)

A. Pennsylvania's Election Code

State law sets out the procedures by which voters may contest an election. See 25 P.S. §§ 3291, 3351, 3456; 42 Pa. C.S. § 764. To initiate an election contest, one hundred or more voters must file a petition in the Pennsylvania Commonwealth Court within twenty days after Election Day and supplement that petition with at least five affidavits that the “election was illegal and the return thereof not correct.” 25 P.S. §§ 3456–3457. The petitioners must also post a bond “conditioned for the payment of all costs which may accrue in said contested nomination or election proceeding.” Id. § 3459.

Pennsylvania law provides two additional methods by which voters may seek a recount and recanvass. First, voters may petition their County Board of Elections. See id. § 3154(e). County Board petitions must be supported by affidavits from three voters in an individual precinct that fraud or error not apparent on the face of the returns has occurred. See id. The petition must be filed “prior to the completion of the computation of all of the returns for the county.” Id. If the Board rejects the request for recount or recanvass, the aggrieved petitioners may appeal the Board’s decision to the Common Pleas Court. See id. § 3157(a); Rinaldi v. Ferrett, 941 A.2d 73, 76-77 (Pa. Commw. Ct. 2007).

Second, voters may petition the Common Pleas Court for a recount or recanvass. See 25 P.S. §§ 3261–3262. Three voters in the same precinct must verify that fraud or error not apparent from the returns was committed in the vote tabulation. See id. § 3261(a). These petitioners must remit a \$50 cash payment or a \$100 bond. See id. § 3262(b.2). Unless the

petitioners plead fraud or error with particularity and offer prima facie evidence supporting that allegation, they must also file qualified petitions in every single precinct in which ballots were cast for the office in question. See id. § 3263(a)(1)(i)-(ii). To contest a statewide election in the Common Pleas Court without evidence of fraud, three petitioners must file affidavits from voters in over nine thousand precincts. (See Pls.’ Br. 12-13, Doc. No. 5.) These petitions must be filed within five days after completion of the County Board’s computation of the vote. See 25 P.S. § 3263(a)(1); Rinaldi, 941 A.2d at 77.

B. Commonwealth Court Election Contest

On Monday, November 28, 2016—the last possible day under Pennsylvania law to bring a contest proceeding—Pennsylvania voters organized by Dr. Stein and represented by her counsel in the instant case filed in Commonwealth Court an election contest, alleging that they had “grave concerns about the integrity of electronic voting machines used in their districts” because of the possibility that the machines could have been hacked. (Maazel Decl. Ex. 37, Doc. No. 9-40 (Nov. 28, 2016 Petition).) The petition was without any of the five required affidavits, was some two pages in length, and did not include any allegation that hacking had actually occurred. (See id.) In light of the rapidly approaching federal safe harbor date, the Commonwealth Court set a hearing for Monday, December 5, 2016 at 10:00 a.m., and ordered the petitioners to post a \$1,000,000 bond no later than December 5 at 5:00 p.m. (after the hearing). (See Intervenors’ Resp. Ex. 3, Doc. No. 38-2 (Nov. 29, 2016 Order).) The Court stated that it would modify the amount of the bond for good cause. (See id.)

The petitioners never asked the Commonwealth Court to reduce the size of the bond. Instead, on December 3, 2016, they voluntarily withdrew their action, explaining that they could not “afford to post the \$1,000,000 bond required by the Court.” (Maazel Decl. Ex. 40, Doc. No.

9-43 (Praeclipe to Discontinue and Withdraw).) Plaintiffs' Counsel did not dispute before me that the \$1,000,000 bond "was effectively a decision not to allow . . . a recount." (Hr'g Tr. 31:14-22.)

C. Other Pennsylvania Recount Efforts

As an extension of the Commonwealth Court suit, on November 28, many voters filed recount and recanvass petitions with their County Boards. (See, e.g., Maazel Decl. ¶ 3 & Ex. 3 ¶ 9, Ex. 6 ¶ 4, Ex. 11 ¶ 15, Ex. 12 ¶ 9, Ex. 13 ¶ 5, Ex. 24 ¶ 3, Ex. 25 ¶ 4, Doc. Nos. 9, 9-3, 9-6, 9-11 to 9-13, 9-24 to 9-25; Lieb Decl. ¶ 5, Doc. No. 7.) Later that day, Defendant Jonathan Marks, Pennsylvania's Commissioner of the Bureau of Commissions, Elections, and Legislation, directed County Boards to accept or reject petitions in accordance with state law. (See Maazel Decl. Ex. 34, Doc. No. 9-37); 25 P.S. §§ 3154(e), 3263(a).

Across the Commonwealth, many County Boards, including Delaware, Lancaster, and Northampton, rejected untimely petitions. (See Maazel Decl. Ex. 11 ¶ 16, Ex. 12 ¶ 16, Ex. 13 ¶ 8, Ex. 25 ¶ 7, Doc. Nos. 9-11 to 9-13, 9-25.) Dr. Stein is currently appealing unfavorable County Board decisions to the Lancaster and Northampton Common Pleas Courts. See Pennsylvania Recount, Jill2016, <http://www.jill2016.com/recountpainfo> (last visited Dec. 12, 2016). Philadelphia, Allegheny, and Lehigh Counties have since completed their recanvasses, and Chester County has concluded its hand recount. (See Maazel Decl. Exs. 35, 44, Doc. Nos. 9-38, 9-47; Hr'g Tr. 90:1-9); Pennsylvania Recount, supra.

No State Court has ordered the forensic review of the electronic voting machines that Dr. Stein seeks, however. The Philadelphia and Allegheny County Common Pleas Courts both rejected Dr. Stein's appeals from County Board decisions denying the forensic examination. See In re Recount and/or Recanvass of the Vote for President of the United States and for United

States Senate in the November 8, 2016 General Election, No. GD 16-023824 (Pa. C.P. Ct. Allegheny Cty. Dec. 8, 2016); Stein v. Phila. Cty. Bd. of Elections, No. 161103335 (Pa. C.P. Ct. Phila. Cty. Dec. 7, 2016). In Philadelphia, Judge Fletman explained that Pennsylvania law “simply does not mandate or allow a candidate ‘to perform a forensic examination of the DRE electronic voting system,’” and that she would “not impose requirements the Legislature has not seen fit to establish,” particularly where “there is absolutely no evidence of any voting irregularities.” Stein, No. 161103335, at 4. Dr. Stein also directly petitioned the Montgomery County Common Pleas Court, which dismissed the petition. (See Maazel Decl. Exs. 31, 42, Doc. Nos. 9-31, 9-45 (Nov. 30, 2016 Hearing Transcript and Order).)

At this time, six or seven County Boards and Courts were still considering recount petitions. (See Hr’g Tr. 8:20-9:11.) Only one actual recount was pending. (See Hr’g Tr. 90:1-9, 121:20-22.)

D. The Instant Suit

On December 5, 2016, Plaintiffs Dr. Stein and Randall Reitz (a Pennsylvania voter and party to the withdrawn Commonwealth Court action) filed the instant Complaint against Commonwealth Secretary Pedro A. Cortés and Commissioner Jonathan Marks, who oversee election administration. (See Compl. ¶¶ 11-12, Doc. No. 1; Reitz Decl. ¶ 9, Doc. No. 9-2.) In what might be described as scattershot allegations, Plaintiffs bring § 1983 claims that Defendants have violated their right to vote, in violation of the Equal Protection Clause, Substantive Due Process, and the First Amendment. (See Compl. ¶¶ 1-6, Doc. No. 1.) Plaintiffs ask me to declare several sections of the Pennsylvania Election Code unconstitutional, and to issue a preliminary injunction ordering Defendants to “institute an immediate recount of paper ballots,”

and permitting Plaintiffs to conduct a “thorough, forensic examination of a reasonable sample of DRE voting systems.” (See Compl. at 18-19, Doc. No. 1 (prayer for relief).)

On December 6, 2016, I granted the unopposed Motion to Intervene filed by President-elect Donald J. Trump, Vice President-elect Michael Pence, their Pennsylvania Electors, Donald J. Trump for President, Inc., and the Republican Party. (See Doc. Nos. 2, 22.) That same day, Plaintiffs filed the instant Motion for a preliminary injunction, asking me to order a recount. (See Pls.’ Mot., Doc. No. 4; Pls.’ Br., Doc. No. 5.) In accordance with my December 6 Case Management Order, on December 8, 2016, Defendants and Intervenors responded. (Doc. Nos. 23, 38, 38-1, 42.)

I held an evidentiary hearing on December 9, 2016, at which Plaintiffs and the Commonwealth each called an expert witness. As I describe below, I credit the Commonwealth’s expert and partially discredit the expert called by Plaintiffs. During the hearing, Plaintiffs narrowed their request for relief: they now seek a hand recount of all paper ballots of one precinct in each of the seventeen paper-ballot Counties and a forensic review of the election management systems of six Counties, including Philadelphia. (See Hr’g Tr. 121:18-22, 122:10-13.) Plaintiffs explained at the hearing that they base their Motion on the purported inadequacies of Pennsylvania’s recount procedures, and the Commonwealth’s use of electronic voting machines that may be susceptible to hacking.

1. Recount Procedures

Plaintiffs contend that the denials by the Commonwealth Court, County Boards, and Common Pleas Courts of their recount petitions amount to violations of their fundamental right to vote. (See Pls.’ Br. 28-34, Doc. No. 5.) Plaintiffs challenge the constitutionality of seven

provisions of the Pennsylvania Election Code as applied to their efforts to obtain recounts and recanvasses:

- The requirement that they post a \$1,000,000 bond to proceed with the Commonwealth Court contest proceeding. See 25 P.S. § 3459.
- The requirement that a County Board recount petition be supported by verified affidavits from three voters in each precinct. See id. § 3154(e).
- The deadline for County Board recount petitions. See id.
- The requirement that a Common Pleas recount petition must be supported by verified affidavits from three voters in each precinct. See id. §§ 3261(a), 3262(a)(i).
- The filing-fee requirement for Common Pleas recount petitions. See id. §§ 3261(b), 3262(a)(i).
- The deadline for Common Pleas recount petitions. See id. §§ 3262(f), 3263(a)(i).
- The requirement that Common Pleas recount petitions include a qualified petition from all precincts unless a petition pleads a particular act of fraud or error. See id. § 3263(a)(1)(i).

2. Use of Electronic Voting Machines

In 1980, Pennsylvania amended its Election Code to permit the use of DRE machines. See 25 P.S. §§ 3031.3, *et seq.* The Code requires the Commonwealth Secretary to “examine and re-examine voting machines” and to make a determination as to whether they meet federal standards and can be safely used. Id. §§ 2621(b), 3031.5(a). In 2012, Secretary Cortés’s predecessor certified each of Pennsylvania’s six DRE machine models as reliable and secure. (See Hr’g Ex. D-6.) The Secretary similarly certified as safe Pennsylvania’s optical-scan machines. See 25 P.S. §§ 2621(b), 3031.5(a). Plaintiffs allege that these certifications notwithstanding, the DRE and optical-scan machines’ possible vulnerabilities have abrogated their right to vote.

E. Related Litigation

Dr. Stein has also sought recounts in Michigan and Wisconsin. In Michigan, the State Board of Canvassers initially ordered a recount to begin on December 7. Dr. Stein asked the Michigan District Court to order the State to begin its recount two days sooner. See Compl., Stein v. Thomas, No. 16-14233, Doc. No. 1 (E.D. Mich. Dec. 2, 2016). On December 5, Judge Goldsmith granted the injunction, and the Sixth Circuit affirmed the following day. See Stein v. Thomas, No. 16-14233, Doc. No. 16 (E.D. Mich. Dec. 5), aff'd, No. 16-2690, 2016 WL 7131508, at *3 (6th Cir. Dec. 6, 2016). On December 6, an intermediate state appeals court ruled, however, that because Dr. Stein was not “an aggrieved party” under Michigan law, she had no legal right to request a recount. Judge Goldsmith then promptly dissolved the injunction he had issued. See Thomas, No. 16-14233, Doc. No. 36 (E.D. Mich. Dec. 7, 2016). In rejecting Dr. Stein’s allegation that Michigan used vulnerable electronic voting machines, Judge Goldsmith explained:

Plaintiffs have not presented evidence of tampering or mistake. Instead, they present speculative claims going to the vulnerability of the voting machinery—but not actual injury. Because mere potentiality does not amount to a claim that the vote was not fairly conducted, Plaintiffs’ new claims are insufficient to maintain the existing TRO.

Id. at 7. On December 9, the Michigan Supreme Court upheld the lower court’s ruling respecting Dr. Stein’s lack of standing, thus precluding any Michigan recount. See Trump v. Bd. of State Canvassers, No. 154868 (Mich. Dec. 9, 2016).

On December 1, the Wisconsin Election Commission ordered Dr. Stein’s requested recount to begin. See Compl. ¶ 12, Great Am. PAC v. Wis. Elections Comm’n, No. 16-795, Doc. No. 1 (W.D. Wis. Dec. 1, 2016). That day, three political action committees sought to

enjoin the recount. See id. On December 9, the Wisconsin District Court refused to issue an injunction. See Great Am. PAC, No. 16-795, Doc. Nos. 36-37 (W.D. Wis. Dec. 9, 2016).

II. Legal Standards

“[A] preliminary injunction is an extraordinary and drastic remedy, one that should not be granted unless the movant, *by a clear showing*, carries the burden of persuasion.” Mazurek v. Armstrong, 520 U.S. 968, 972 (1997) (per curiam) (quoting 11A Wright & Miller, Fed. Prac. & Proc. § 2948 (2d ed. 1995)); see Fed. R. Civ. P. 65(a). “A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.” Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7, 20 (2008) (citations omitted). The moving party bears the “heavy burden” of showing that these elements weigh in favor of a preliminary injunction. Republican Party of Pa. v. Cortés, No. 16-5524, 2016 WL 6525409, at *3 (E.D. Pa. Nov. 3, 2016) (citing Ferring Pharmas., Inc. v. Watson Pharmas., Inc., 765 F.3d 205, 210 (3d Cir. 2014), and Punnett v. Carter, 621 F.2d 578, 588 (3d Cir. 1980)).

Because Plaintiffs seek an injunction that “is mandatory and will alter the status quo,” they “must meet a higher standard of showing irreparable harm in the absence of the injunction.” Bennington Foods LLC v. St. Croix Renaissance, Grp., LLP, 528 F.3d 176, 179 (3d Cir. 2008).

The Federal Rules of Evidence do not strictly apply during preliminary injunction proceedings. I must exercise discretion in “weighing all the attendant factors, including the need for expedition, to assess whether, and to what extent, affidavits or other hearsay materials are appropriate given the character and objectives of the injunctive proceeding.” Kos Pharmas., Inc. v. Andrx Corp., 369 F.3d 700, 719 (3d Cir. 2004) (internal quotation marks and citation omitted).

III. Standing

Defendants and Intervenors argue that Plaintiffs lack standing to bring the instant suit. (See Intervenors' Resp. 16-17, Doc. No. 38-1; Defs.' Resp. 13-17, Doc. No. 42; Hr'g Tr. 99:7-100:19.) I agree.

The "existence of a case or controversy is a prerequisite to all federal actions, including those for declaratory or injunctive relief." Belitskus v. Pizzinigrilli, 343 F.3d 632, 639 (3d Cir. 2003) (quoting Phila. Fed'n of Teachers v. Ridge, 150 F.3d 319, 322-23 (3d Cir. 1998)); see also U.S. Const., Art. III § 2 (jurisdiction of federal courts limited to "Cases" or "Controversies"). To make out Article III standing,

a plaintiff must show (1) that it has suffered an "injury in fact" that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Friends of the Earth, Inc. v. Laidlaw Envtl. Svcs. (TOC), Inc., 528 U.S. 167, 180-81 (2000) (citing Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992)). The "party invoking federal jurisdiction bears the burden of establishing" standing. Wittman v. Personhuballah, 136 S. Ct. 1732, 1737 (2016) (quoting Lujan, 504 U.S. at 561).

At the December 9 hearing, Intervenors argued persuasively that Plaintiffs lack standing. (See Hr'g Tr. 99:7-100:19.) Remarkably, Plaintiffs did not respond. Even though Dr. Stein was present and could have testified as to why she is an aggrieved party with standing to seek a recount, she was not called.

The allegations in Plaintiffs' Complaint respecting standing are less than clear. They allege that Pennsylvania's DRE machines are "vulnerable, hackable, [and] antiquated," that the Pennsylvania Election Code's recount provisions are "labyrinthine, incomprehensible, and

impossibly burdensome,” and that neither Dr. Stein nor her voters have been permitted to examine the machines. (See Compl. ¶¶ 1-5, 63, 82, Doc. No. 1.) But see 25 P.S. § 3031.14(b)(2) (allowing each party on the ballot to be present during testing and “to make independent tests of the equipment prior to, during, and following the vote count”). Significantly, although Plaintiffs apparently question whether Pennsylvania votes were correctly counted, they do not so allege. (See Compl. ¶ 4, Doc. No. 1 (“Were Pennsylvania votes counted accurately? That truth is not difficult to learn.”).) Finally, Plaintiffs make no factual allegations respecting Mr. Reitz other than that he “is a voter in the State of Pennsylvania, and voted in the 2016 presidential election.” (Id. ¶ 10.) These allegations are insufficient to confer standing.

Neither Plaintiff has alleged that she or he has suffered an actual injury. Dr. Stein is not a Pennsylvania voter and does not allege that a recount will change the Pennsylvania vote total in her favor. Although Mr. Reitz is a Pennsylvania voter, he has not alleged that his vote was inaccurately recorded or tallied in the final Pennsylvania vote count. Plaintiffs’ allegation that voting machines may be “hackable,” and the seemingly rhetorical question they pose respecting the accuracy of the vote count, simply do not constitute injury-in-fact. See, e.g., Clapper v. Amnesty Int’l USA, 133 S. Ct. 1138, 1148 (2013) (the plaintiffs’ standing argument, which “rest[ed] on their highly speculative fear” of government surveillance and “on a highly attenuated chain of possibilities,” did not satisfy injury requirement); Reilly v. Ceridian Corp., 664 F.3d 38, 42 (3d Cir. 2011) (after payroll processor’s database was hacked, the plaintiffs’ allegations that their personal information could be misused “rel[ied] on speculation” and did not constitute injury-in-fact).

It also appears that Plaintiffs seek to protect the rights of all Pennsylvania voters. (See, e.g., Compl. ¶ 101, Doc. No. 1 (“Defendants . . . have deprived and severely

burdened . . . Pennsylvania voters, including Plaintiff Randall Reitz, of their fundamental right to vote.”). There is no authority to support such an invocation of standing. See Cty. Ct. of Ulster Cty., N.Y. v. Allen, 442 U.S. 140, 155 (1979) (“As a general rule, if there is no constitutional defect in the application of the statute to a litigant, he does not have standing to argue that it would be unconstitutional if applied to third parties in hypothetical situations.” (citing Broadrick v. Oklahoma, 413 U.S. 601, 610 (1973))); Broadrick, 413 U.S. at 610-11 (“[C]onstitutional rights are personal and may not be asserted vicariously. . . . Constitutional judgments . . . are justified only out of the necessity of adjudicating rights in particular cases between the litigants brought before the Court.”).

The Supreme Court’s reasoning here is instructive:

First, the Court has held that when the asserted harm is a “generalized grievance” shared in substantially equal measure by all or a large class of citizens, that harm alone normally does not warrant exercise of jurisdiction. Second, even when the plaintiff has alleged injury sufficient to meet the “case or controversy” requirement, this Court has held that the plaintiff generally must assert his own legal rights and interests, and cannot rest his claim to relief on the legal rights or interests of third parties. Without such limitations . . . the courts would be called upon to decide abstract questions of wide public significance even though other governmental institutions may be more competent to address the questions and even though judicial intervention may be unnecessary to protect individual rights.

Warth v. Seldin, 422 U.S. 490, 499-500 (1975) (citations omitted); see also Oh v. Phila. Cty. Bd. of Elections, No. 08-81, 2008 WL 4787583, at *7 (E.D. Pa. Oct. 31, 2008) (“The prudential principles support that [a losing candidate] cannot rest his claim to relief on the legal rights or interests of the voters. The claim plaintiff alleges on behalf of these voters, even if substantiated, would amount to a “generalized grievance” shared in substantially equal measure by all or a large class of citizens’ and is not sufficient to confer standing.” (quoting Warth, 422 U.S. at 499)). Cf. Pa. Psychiatric Soc’y v. Green Spring Health Svcs., Inc., 280 F.3d 278, 288 & n.10 (3d Cir. 2002) (suggesting that plaintiff “candidates for public office may be able to assert the

rights of voters,” but only where the plaintiff herself suffers an injury and voters are “hindered from asserting [their] own rights and share[] an identity of interests with the plaintiff”).

Finally, Plaintiffs have not shown that the extraordinary relief they seek—a hand recount of a sample of paper ballots in optical-scan Counties and a forensic examination of six Counties’ election management systems—will redress their alleged injuries. Dr. Stein received less than 1% of the vote in Pennsylvania and does not allege that the recount and forensic examination will yield the votes necessary for her to prevail in Pennsylvania’s election. Mr. Reitz voted on a DRE machine in Montgomery County and has not explained how a forensic examination of a sample of County election management computer systems would vindicate his individual right to vote. (See Reitz Decl. ¶¶ 2, 15, Doc. No. 9-2.) There is no evidence before me even suggesting that a recount or audit of any kind would confirm whether the vote of Mr. Reitz or anyone else was counted inaccurately, or would somehow correct an inaccurately recorded vote.

In sum, because Plaintiffs have alleged speculative injuries that are not personal to them and could not be redressed by the relief they seek (or any relief I could order), they are without standing to bring their claims.

Given the significance of this matter, I will fully discuss all the alternative grounds on which I base my denial of Plaintiffs’ Motion.

IV. Jurisdiction

Even if Plaintiffs had standing, their State Court recount efforts raise serious questions about my jurisdiction to consider their claims.

A. Rooker-Feldman Doctrine

In 1923, the Supreme Court held that federal courts may not “exercis[e] jurisdiction over a case that is the functional equivalent of an appeal from a state court judgment.” Marran v.

Marran, 376 F.3d 143, 149 (3d Cir. 2004) (citing D.C. Ct. of Appeals v. Feldman, 460 U.S. 462 (1983) and Rooker v. Fidelity Trust Co., 263 U.S. 413 (1923)). This doctrine applies where: (1) the federal plaintiff lost in state court; (2) the plaintiff complains of injuries caused by a state court judgment; (3) that judgment was rendered before the federal suit was filed; and (4) the plaintiff is inviting the district court to review and reject the state judgment. See Exxon Mobil Corp. v. Saudi Basic Indus. Corp., 544 U.S. 280, 284 (2005); Great W. Mining & Mineral Co. v. Fox Rothschild LLP, 615 F.3d 159, 166 (3d Cir. 2010) (identifying the second and fourth requirements as key to the Rooker-Feldman inquiry). Rooker-Feldman extends to actions brought by parties in privity with the parties in the state action. See Marran, 376 F.3d at 151. State Court judgments include interlocutory orders and orders of lower state courts. Pieper v. Am. Arbitration Ass'n, Inc., 336 F.3d 458, 462 (6th Cir. 2003). I must consider “whether the injury complained of in federal court existed prior to the state-court proceedings and thus could not have been ‘caused by’ those proceedings.” Great W. Mining & Mineral Co., 615 F.3d at 167.

As I have described, on November 28, 2016, voters organized by Dr. Stein, including Mr. Reitz, initiated an election contest in the Commonwealth Court. (See Maazel Decl. Ex. 37, Doc. No. 9-40.) They based their petition on the same expert opinion they offer here: that there exists the theoretical possibility that Pennsylvania’s voting machines may have been hacked. (See id.) They asked the Court to order “a full recount of the 2016 Presidential Election in all counties in the Commonwealth to determine the true winner of that Election.” (Id.) Petitioners asked the Court to set bond at \$25,000. (See id.) On December 2, 2016, the Commonwealth Court ordered the petitioners to post a \$1,000,000 bond, causing them to withdraw their contest petition. (See Maazel Decl. Ex. 39, Doc. No. 9-42 (Dec. 2, 2016 Order); id. Ex. 40, Doc. No. 9-43 (Dec. 3, 2016 Praecipe to Discontinue and Withdraw) (“Petitioners are citizens of ordinary

means. They cannot afford to post the \$1,000,000 bond required by the Court. Accordingly, kindly mark the above captioned matter withdrawn and discontinued.”).)

It appears that the four Rooker-Feldman abstention criteria have been met. As Plaintiffs’ Counsel acknowledged during the December 9 hearing, the Commonwealth Court’s December 2 order was an adverse state court decision. (See Hr’g Tr. 31:11-22 (“The Commonwealth Court’s decision to require a million dollar bond was effectively a decision not to allow . . . a recount.”)); see also Hagerty v. Succession of Clement, 749 F.2d 217, 219-20 (5th Cir. 1987) (adverse ruling requirement read expansively to include state court procedural rulings). Plaintiffs certainly complain of injuries caused by the Commonwealth Court’s decision, which was rendered before they filed the instant suit. Finally, Plaintiffs are inviting me to review and reject the Commonwealth Court’s decision. Indeed, the legal memorandum they have submitted here is undoubtedly the same as the appellate brief they would have filed, had Plaintiffs chosen to appeal the Commonwealth Court’s decision to the Pennsylvania Supreme Court.

Courts discussing Rooker-Feldman abstention have repeatedly explained that it is intended to preclude unsuccessful State Court litigants from “appealing” unfavorable State Court rulings to federal courts. See, e.g., Marran, 376 F.3d at 149. Yet, that is just what Plaintiffs seek to do here: ask me to “overrule” the Commonwealth Court’s effective refusal to order a recount. Rooker-Feldman compels me to abstain.

B. Younger Abstention

District courts have discretion to “abstain from exercising jurisdiction over a particular claim where resolution of that claim in federal court would offend principles of comity by interfering with an ongoing state proceeding.” Lazaridis v. Wehmer, 591 F.3d 666, 670 (3d Cir. 2010) (per curiam) (citing Middlesex Cty. Ethics Comm. v. Garden State Bar Ass’n, 457 U.S.

423, 437 (1982)); Addiction Specialists, Inc. v. Twp. of Hampton, 411 F.3d 399, 408 (3d Cir. 2005). Younger abstention is proper where: (1) there are ongoing state judicial proceedings involving the federal plaintiff; (2) the state proceedings implicate important state interests; and (3) the state proceedings afford an adequate opportunity to raise the federal claims. See Lazaridis, 591 F.3d at 670. Abstention is particularly appropriate where the requested equitable relief would “render the state court’s orders or judgments nugatory.” Schall v. Joyce, 885 F.2d 101, 108 (3d Cir. 1989).

1. Ongoing State Judicial Proceedings

Under Younger, the appellate review available to the State Court plaintiffs constitutes an ongoing proceeding. See, e.g., Laurel Sand & Gravel, Inc. v. Wilson, 519 F.3d 156, 166 (4th Cir. 2008) (applying Younger to State Court appeal of administrative proceeding); Maymo-Melendez v. Alvarez-Ramirez, 364 F.3d 27, 35 (1st Cir. 2004) (same); Majors v. Engelbrecht, 149 F.3d 709, 713 (7th Cir. 1998) (same); see also Huffman v. Pursue, Ltd., 420 U.S. 592, 608 (1975) (“Virtually all of the evils at which Younger is directed would inhere in federal intervention prior to completion of state appellate proceedings.”).

Plaintiffs confirmed at the December 9 hearing that Dr. Stein has initiated multiple state recounts, and that “six or seven” County Boards and Common Pleas Courts were still considering their recount petitions. (Hr’g Tr. 8:20-9:11); see also Pennsylvania Recount, Jill2016, <http://www.jill2016.com/recountpainfo> (last visited Dec. 12, 2016) (indicating Dr. Stein is appealing from Lancaster and Northampton County’s decisions). Further, the Allegheny and Philadelphia Common Pleas Courts’ denials of forensic audits are ripe for appeal. See Pa. R.A.P. 903(c).

In these circumstances, the first Younger prong has been satisfied.

2. *Important State Interests*

The Commonwealth has an obvious interest in regulating the conduct of its elections.

See, e.g., Timmons v. Twin Cities Area New Party, 520 U.S. 351, 366 (1997) (maintaining stability of political system during election); Anderson v. Celebreeze, 460 U.S. 780, 798 (1983) (voter education); Storer v. Brown, 415 U.S. 724, 735 (1974) (avoiding political fragmentation during election); Green Party of Pa. v. Aichele, 89 F. Supp. 3d 723, 751 (E.D. Pa. 2015) (preserving the integrity of the nomination process); Petition of Berg, 713 A.2d 1106, 1109 (Pa. 1998) (managing ballot size and ensuring statewide support for candidates); Cavanaugh v. Schaeffer, 444 A.2d 1308, 1311-12 (Pa. Commw. Ct. 1982) (ensuring serious candidacies).

In analyzing this requirement, however, I must “adequately examine the facts and claims alleged in the federal and state actions.” Addiction Specialists, Inc., 411 F.3d at 410 (citing Gwynedd Props., Inc. v. Lower Gwynedd Twp., 970 F.2d 1195, 1203 (3d Cir. 1992)). The threshold question is whether enjoining the state court’s enforcement of the Election Code, if granted, would be tantamount to invalidating the Election Code provisions themselves. See Addiction Specialists, Inc., 411 F.3d at 410-11.

The state court petitioners seek the same relief Plaintiffs seek here: recounts of votes counted by optical-scan machines and a forensic review of DRE machines. Plaintiffs here are thus effectively asking me to nullify the Pennsylvania Election Code provisions applied by the State Courts and Boards, and to annul the unfavorable judgments issued by these bodies. Cf. Gwynedd Props., Inc., 970 F.2d at 1201 (abstention not appropriate where “federal plaintiff seeks only prospective relief without seeking to annul state court judgments”).

Finally, there is no suggestion that Plaintiffs may not raise in the Pennsylvania Courts the same constitutional claims they have raised here. Plainly they can. See, e.g., Petition of Berg,

713 A.2d 1106 (Pa. 1998); Trinsey v. Mitchell, 625 A.2d 49 (Pa. 1993); Cavanaugh v. Schaeffer, 444 A.2d 1308 (Pa. Commw. Ct.), aff'd, In re Cavanaugh, 444 A.2d 1165 (Pa. 1982) (per curiam).

In sum, because any decision I render on Plaintiffs' constitutional claims will impinge upon the existing state proceedings, I will abstain under Younger.

V. Delay

As I have described, despite the December 13 certification deadline, Plaintiffs waited until November 28 to proceed in Commonwealth Court and until December 5 to proceed here. That delay has caused what Judge Pappert recently described as a "judicial fire drill" and what I recently described as a "mad scramble"—unnecessary and unfair to all concerned. Pa. Democratic Party v. Republican Party of Pa., No. 16-5664, 2016 WL 6582659, at *5 (E.D. Pa. Nov. 7, 2016); Republican Party of Pa. v. Cortés, No. 16-5524, 2016 WL 6525409, at *4 (E.D. Pa. Nov. 3, 2016). Contrary to Plaintiffs' suggestions, the December 9 hearing underscored the absence of any good reason for their delay. Plaintiffs base this action on Pennsylvania's use of electronic machines to tabulate votes and the recount provisions of its Election Code. The Commonwealth's use of electronic machines began well before the 2016 election. Optical-scan machines have been in use for decades. See Banfield v. Cortés, 110 A.3d 155, 159 (Pa. 2015). Pennsylvania's use of DRE machines was the subject of nine years of State Court litigation. See id. at 155, 160-65, 178. Plaintiffs' expert witness acknowledged at the December 9 hearing that he knew before the 2016 election all the information on which he based his opinion respecting the DRE machines' purported vulnerabilities. (See Hr'g Tr. 27:10-16.) The recount procedures that Plaintiffs challenge were largely enacted in 1937. See Pennsylvania Election Code, Act of June 3, 1937, Pub. L. No. 1333, art. I §§ 101, *et seq.* (codified as amended at 25 P.S. §§ 2600, *et*

seq.). Once again, in the run up to Election Day, Dr. Stein had the right under the Election Code to be present or to have a technical expert be present on her behalf, for the testing of the voting machines and the counting of the ballots. See Stein v. Phila. Cty. Bd. of Elections, No. 161103335, at 3 (Pa. C.P. Ct. Phila. Cty. Dec. 7, 2016) (citing 25 P.S. §§ 2650, 3031.14(b)(2)). She chose not to avail herself of that right.

The only relevant fact unknown to Plaintiffs before the election was its outcome. Yet, Dr. Stein then waited nearly three weeks, until November 28, to file the Commonwealth Court contest petition and the County Board recount petitions. (See Maazel Decl. Ex. 37, Doc. No. 9-40.) During the December 9 hearing, Plaintiffs’ Counsel was unable to offer a credible justification for this delay. Once again, even though Dr. Stein was present and could have explained under oath her reasons for delay, she did not do so.

Having effectively been denied a recount in Commonwealth Court, Plaintiffs filed the instant suit on December 5. As I explain below, if that delay makes it impossible for the Commonwealth to certify its Electors by tomorrow, all of Pennsylvania’s six million voters could be disenfranchised. Courts have repeatedly held that such prejudicial and unnecessary delay alone provides ample grounds to deny the emergency injunctive relief Plaintiffs seek. See, e.g., Santana Prods., Inc. v. Bobrick Washroom Equip., Inc., 401 F.3d 123, 135 (3d Cir. 2005); Pa. Democratic Party, 2016 WL 6582659, at *5 (collecting cases); see also Crookston v. Johnson, 841 F.3d 396, 398 (6th Cir. 2016) (“Call it what you will—laches, the Purcell principle, or common sense—the idea is that courts will not disrupt imminent elections absent a powerful reason for doing so.”). I am compelled to reach the same conclusion here. Plaintiffs are not entitled to the “emergency” relief they seek because they have inexcusably waited well past the eleventh hour to seek it.

VI. Entitlement to Injunctive Relief

The December 9 hearing confirmed that Plaintiffs have not met any of the requirements for the mandatory injunctive relief they seek.

A. Likelihood of Success on the Merits

Plaintiffs contend that Pennsylvania's use of electronic voting machines raises concerns of tampering, and its "Election Code, as applied by defendants and the [E]lection [B]oards, poses such barriers to verifying the vote as to deny the people of Pennsylvania the fundamental right to have their vote counted." (Pls.' Br. 27, Doc. No. 5.) Plaintiffs have failed to demonstrate a likelihood of prevailing on the merits of these claims.

"When the state legislature vests the right to vote for President in its people, the right to vote as the legislature has prescribed is fundamental." Bush v. Gore, 531 U.S. 98, 104 (2000) (per curiam). The right to vote necessarily includes the right to have the vote fairly counted. See Reynolds v. Sims, 377 U.S. 533, 554 (1964) ("[Q]ualified voters have a constitutionally protected right . . . to have their votes counted. (citing United States v. Mosley, 238 U.S. 383, 386 (1915)); United States v. Classic, 313 U.S. 299, 315 (1941) (right to vote includes right of "qualified voters within a state to cast their ballots and have them counted"). Due process may be implicated "[i]f the election process itself reaches the point of patent and fundamental unfairness." Griffin v. Burns, 570 F.2d 1065, 1077 (1st Cir. 1978); see also Marks v. Stinson, 19 F.3d 873, 888 (3d Cir. 1994) ("[R]ejection of a ballot where the voter has been effectively deprived of the ability to cast a legal vote implicates federal due process concerns.").

The right to have one's vote counted does not, however, encompass the right to have one's vote verified through a mandatory statewide recount. As Judge Goldsmith explained in rejecting Dr. Stein's Michigan recount suit, "[t]here is no case law recognizing an independent

federal right to a recount that either this Court or the parties have come across, in the absence of actual deprivation of voting rights.” See Thomas, No. 16-14233, Doc. No. 36 at 7 (E.D. Mich. Nov. 7, 2016). Plaintiffs’ Counsel conceded as much at the December 9 hearing. (See Hr’g Tr. 37:4-11.)

No authority suggests otherwise. Courts have explained ballot access restrictions can “limit the field of candidates from which voters might choose.” Anderson v. Celebreeze, 460 U.S. 780, 786 (1983) (quoting Bullock v. Carter, 405 U.S. 134, 143 (1972)); Belitskus v. Pizzinigrilli, 343 F.3d 632, 643 (3d Cir. 2003) (same); Const. Party of Pa. v. Cortés, 116 F. Supp. 3d 486, 501 (E.D. Pa. 2015) (same). Recount restrictions impose no such burden.

Due process limitations on the manner by which elections may be conducted are also separate from any “right” to a mandatory recount. The (rare) decisions that sustain due process challenges to elections involve documented instances of improperly cast ballots, wholesale refusal to count properly cast ballots, direct infringements of the right to cast ballots, or a total failure to conduct the election. See Marks, 19 F.3d at 887 (“massive absentee ballot fraud, deception, intimidation, harassment and forgery,” and “many of the absentee votes were tainted”); Griffin, 570 F.2d at 1074 (state refused to count “the absentee and shut-in ballots that state officials had offered to the voters”); Bonas v. Town of N. Smithfield, 265 F.3d 69 (1st Cir. 2001) (failure to hold election required by town charter); Duncan v. Poythress, 657 F.2d 691 (5th Cir. Unit B Sept. 1981) (refusal to call special election required by state law); see also League of Women Voters of Ohio v. Brunner, 548 F.3d 463, 478 (6th Cir. 2008) (sustaining due process challenge where “voters were denied the right to vote because their names were missing from the rolls,” “[p]oll workers improperly refused assistance to disabled voters,” and “[p]rovisional ballots were not distributed to appropriate voters”). Due process was impugned in these cases

because the challenged government actions had impaired or outright barred voters from casting a first, constitutionally protected ballot.

Plaintiffs base their § 1983 claims on their contention that the Pennsylvania Election Code's recount restrictions, taken together, impose a "severe" burden on their right to vote and are not "narrowly drawn to advance compelling state interests." (Pls.' Br. 30, Doc. No. 5 (citing Belitskus, 343 F.3d at 643).) I do not agree. Pennsylvania's recount procedures are not impermissibly "arbitrary or unreasonable." Stein v. Thomas, No. 16-2690, 2016 WL 7131508, at *3 (6th Cir. Dec. 6, 2016). "[T]here must be a substantial regulation of elections if they are to be fair and honest and if some sort of order, rather than chaos, is to accompany the democratic processes." Storer v. Brown, 415 U.S. 724, 730 (1974). Concomitant with the principles of federalism, Pennsylvania has developed its own statutory framework by which voters may challenge elections, a framework courts have applied for decades without any hint that the required procedures might violate the Constitution. See, e.g., Olshansky v. Montgomery Cty. Election Bd., 412 A.2d 552 (Pa. 1980) (bond provision); In re Recount of Ballots Cast in General Election on Nov. 6, 1973, 325 A.2d 303 (Pa. 1974) (time limits and verification requirement); Pfuhl v. Coppersmith, 253 A.2d 271 (Pa. 1969) (verification provision); Appeal of Bradley, 42 A.2d 155 (Pa. 1945) (time limits); In re Pazdrak's Contested Election, 137 A. 109 (Pa. 1927) (verification provision). The "reasonable, nondiscriminatory restrictions" on initiating recounts serve an "important regulatory interest": ensuring that election challenges are swiftly and fairly resolved to preserve "the integrity of the vote." Burdick v. Takushi, 504 U.S. 428, 434 (1992) (quoting Anderson, 460 U.S. at 788)); (see also Pa. Senate Majority Caucus *Amicus* Br. 4, Doc. No. 46.)

Finally, the Election Code's procedures may seem burdensome to Plaintiffs because they needlessly waited three weeks—until November 28—to initiate their statewide recount campaign. Their most significant protest that is unrelated to timing and deadlines is the \$1,000,000 bond order by the Commonwealth Court. Yet, the Court stated that it would change the bond amount “upon good cause shown.” (Intervenors’ Resp. Ex. 4, Doc. No. 38-2 (Dec. 2, 2016 Order).)

In these circumstances, Plaintiffs have not shown a likelihood that they will prevail on the merits of their constitutional claims.

B. Immediate Irreparable Harm

I agree with Plaintiffs that tampering with the Pennsylvania vote totals would violate the right to vote itself and constitute an irreparable harm. See Council of Alt. Political Parties v. Hooks, 121 F.3d 876, 883 (3d Cir. 1997) (infringement on voting rights “cannot be alleviated after the election”); Williams v. Salerno, 792 F.2d 323, 326 (2d Cir. 1986) (voters “would certainly suffer irreparable harm if their right to vote were impinged upon”); Marks v. Stinson, 1994 WL 47710, at *13-14 (E.D. Pa. Feb. 18) (violation of right to vote in free and fair election constituted irreparable harm), rev’d in part on other grounds, 19 F.3d 873 (3d Cir. 1994). Plaintiffs have presented no credible evidence, however, that any such tampering occurred or could occur; the Commonwealth presented compelling evidence that it did not.

As I have described, for decades, Pennsylvania has had in place extensive laws and protocols intended to ensure the integrity of the vote. At the December 9 hearing, the Commonwealth called Dr. Michael Shamos, who was deeply involved in the creation and monitoring of Pennsylvania’s voting security procedures. (See Hr’g Tr. 45:22-46:13; Hr’g Ex. D-5 ¶ 6.) With a Yale computer science Ph.D. and a law degree, Dr. Shamos is an expert in

electronic voting, the electronic voting provisions of the Pennsylvania Election Code, and computer science. (See Hr'g Tr. 44:23-45, 45:18-19, 73:5-8; Hr'g Ex. D-5 ¶ 2.)

Plaintiffs seem to suggest that Pennsylvania's votes are recorded and tabulated statewide by a single computer that is Internet-accessible and susceptible to tampering. As Dr. Shamos made clear, however, this simply is not so. (See Hr'g Tr. 59:10-24, 60:17-61:2.)

Plaintiffs also base their voting security allegations on the possibility that "malware" might have been secretly installed in Pennsylvania voting and vote tabulation machines, thus corrupting Pennsylvania's voting results. Dr. Shamos made clear, however, that, given Pennsylvania's highly dispersed system of taking and tabulating votes and the numerous integrity checks provided by law and practice, no such "hack" could be effected.

The Commonwealth employs many thousands of DRE machines (4,200 in Allegheny County alone). (See Hr'g Tr. 62:20-24.) Before Pennsylvania's DRE machines are first put into use, independent testing authorities check them for malware. (See Hr'g Tr. 62:12-24.) These authorities also conduct "a forensic examination of the code" for any software updates for the DRE machines. (Hr'g Tr. 74:4-17.) The Commonwealth again tests the machines before each election; any machine with a malware infection will fail the test. (See Hr'g Tr. 49:13-16.) If malware is on the machine after the election, examiners may compare "hash functions" to determine if the "malware is still there." (Hr'g Tr. 49:23-50:3.) Even if the malware were specially programmed (as Plaintiffs conjure) to activate only on Election Day and delete itself when its work concludes (a programming feat Dr. Shamos has never seen accomplished), it would be detected by "parallel testing"—a process by which County employees conduct a simulated test vote on specially sequestered machines. (Hr'g Tr. 49:16-22, 55:22-56:20.)

Allegheny County conducted parallel testing during the 2016 election and did not report any irregularities. (See Hr'g Tr. 85:15-20.)

Dr. Shamos also described the insuperable logistical difficulties involved in installing malware on each of Pennsylvania's many thousands of DRE machines. Because DREs do not connect to the Internet, hackers cannot upload malware onto them remotely. (See Maazel Decl. Ex. 1, Doc. No. 9-1 (Halderman Aff. ¶ 18).) Physically hacking DREs to influence an election is practically impossible. Each machine is sealed by Commonwealth voting officers. (See Hr'g Tr. 50:9-11.) It would take substantial time to open a DRE, hack it, close it, and apply counterfeit seals. (See Hr'g Tr. 50:11-13.) In Dr. Shamos's view, it is less than implausible to suggest that anyone secretly could hack Pennsylvania's DREs without being noticed. (See Hr'g Tr. 50:9-20 (estimating "it would take four months" to hack all of Allegheny County's DRE machines).)

Dr. Shamos credibly explained that any attempts to place malware onto the DRE machines through other methods would also fail. Portable Election Ballots (PEBs)—small cartridges that carry ballot templates and are connected to DRE machines on Election Day—are removable media that could theoretically carry malware to the DRE machines. PEBs cannot be used to hack the machines while the polls are open, however. (See Hr'g Tr. 51:19-20, 53:6-12, 53:23-54:7, 54:4-8.) Furthermore, the PEBs do not connect to the Internet; instead, they connect only to each County's central election management computer system, which is turned on only "a few times a year" and does not connect to the Internet. (Hr'g Tr. 51:8-11.) Indeed, it is illegal under Pennsylvania law to connect those County computer systems to the Internet. (See Hr'g Tr. 76:4-11.)

Moreover, because each Pennsylvania County uses a different central election management computer system, there is no single location through which hackers could introduce

malware that would infect all of Pennsylvania's DRE machines. (See Hr'g Tr. 59:21-24, 60:17-61:2.) Instead, hackers would have to attack separately the systems of each of the fifty-four Counties that use DRE machines.

Finally, Dr. Shamos clearly and credibly explained that suggestions of foreign hacking influencing the 2016 Election—including President Obama's December 9 referral of such hacking for investigation by the Central Intelligence Agency—related only to email servers and the like, and so had nothing to do with the integrity of Pennsylvania's voting machines. (See Hr'g Tr. 58:24-59:9.)

Although Dr. Shamos acknowledged the theoretical possibility that an individual DRE machine could be hacked, he credibly explained that in light of all of the protections in place, the suggestion of widespread hacking borders on the irrational. (See Hr'g Tr. 63:23-64:9 (“The [vote tampering] scenarios that have been posited are approximately as likely as the fact that androids from outer space are living amongst us and passing as humans.”).)

In contrast, Plaintiffs' computer science expert, Dr. J. Alex Halderman, although qualified as a computer science “expert,” knew virtually nothing about Pennsylvania's security procedures, the practices of the Commonwealth's election officials, or the Pennsylvania Election Code. Dr. Halderman admitted that he had “no evidence” that any voting machine was hacked, and that the election outcome was “probably not” the result of a hack. (Hr'g Tr. 25:22-26:1, 26:19-24.) Insofar as Dr. Halderman opined that even though it was “more likely than not that there was no hack,” there remains a “significant possibility” that a hack occurred, I discredit that contradictory testimony. (Hr'g Tr. 17:3-6, 29:5-11.) Unlike Dr. Shamos, who based his opinions on Pennsylvania's actual practices and requirements, Dr. Halderman based his opinion on public media reports of possible hacking in Illinois and Arizona, and hacking of the

Democratic National Committee's email server before the election. (See Hr'g Tr. 17:7-24; see also Maazel Decl. Ex. 1, Doc. No. 9-1 (Halderman Aff. Exs. B-D, F, H).) Once again, these media reports do not remotely relate to Election Day hacks of offline voting machines in Pennsylvania. (See Hr'g Tr. 58:24-59:9.)

Plaintiffs submitted the reports of four other experts, each of whom opined only that Pennsylvania's DRE machines were vulnerable to hacking, not that any hacking actually occurred. (See Hursti Aff. ¶ 15, Doc. No. 10 ("These DRE machines are *susceptible* to fraud and tampering." (emphasis added)); Lopresti Aff. ¶ 11, Doc. No. 11 ("The DRE Machines are unreliable and *susceptible* to tampering and fraud." (emphasis added)); Buell Aff. ¶ 2, Doc. No. 12 ("In my opinion, the electronic voting system used by Allegheny County . . . is *vulnerable* to malicious interference and inadvertent error." (emphasis added)); Hoke Aff. ¶ 9, Doc. No. 13 ("The DRE Machines Used In Pennsylvania Are *Vulnerable*." (emphasis added)).) One of Plaintiffs' experts averred that optical-scan machines could also theoretically be hacked, but did not provide any evidence to suggest that they were. (See Hursti Aff. ¶¶ 40-58, Doc. No. 10.) Even if I were to credit these opinions, they make out little more than the theoretical possibility a voting machine somewhere in the Commonwealth might be susceptible to tampering.

There can be no more serious challenge to an election than the suggestion that the votes cast were dishonestly recorded. Yet, "Plaintiffs have not made out even the possibility—much less the likelihood"—that any vote tampering occurred in Pennsylvania during the 2016 election. Pa. Republican Party v. Pa Democratic Party, No. 16-5664, 2016 WL 6582659, at *7 (E.D. Pa. Nov. 7, 2016). Plaintiffs have certainly not made the required "clear showing of immediate irreparable injury." ECRI v. McGraw-Hill, Inc., 809 F.2d 223, 226 (3d Cir. 1987) (quoting Cont'l Grp., Inc. v. Amoco Chems. Corp., 614 F.2d 351, 359 (3d Cir. 1980)). In these

circumstances, I must deny their request for a mandatory injunction.

C. The Balance of Equities and Public Interest

Because these factors are intertwined, I consider them together. Plaintiffs contend that the equities weigh in their favor because “many voters will effectively be denied the right to vote” without a recount. (Pls.’ Br. 39, Doc. No. 5.) As I have discussed, however, Plaintiffs have raised only spectral fears that machines were hacked or votes miscounted. Against these unreasoning concerns, I must balance the real risk that the twelfth hour recount recount order that Plaintiffs seek would disenfranchise six million Pennsylvanians. Once again, Plaintiffs seek a hand recount of all paper ballots cast in one precinct in each of the seventeen optical-scan Counties (except for Chester County) and a forensic review of the election management systems of six Counties, including Philadelphia. (See Hr’g Tr. 121:18-122:1, 122:10-13.) I credit Dr. Shamos’s testimony that it would take a “long day” to count the seventeen precincts of paper ballots that Plaintiffs have requested. (Hr’g Tr. 126:17-24.) Before the recount can begin, however, each County Board (none of which is a Party here) must find, hire, and train individuals to conduct the recount. (See Hr’g Tr. 124:10-15, 127:3-15.) All of this obviously cannot be completed before December 13 (tomorrow)—the date by which Pennsylvania’s Presidential election results must be certified. I also credit Dr. Shamos’s testimony that no meaningful forensic review of election management systems could conclude by tomorrow evening. Significantly, Dr. Halderman testified that the forensic examination would take at least two days. (Hr’g Tr. 123:12-17.) Even if I were to credit that testimony, Plaintiffs’ own expert confirmed that ordering the forensic audit would preclude Pennsylvania’s compliance with the December 13 certification requirement. See 3 U.S.C. § 5. If Pennsylvania does not certify its election results by tomorrow, it is likely that the selection of the Commonwealth’s electors will

devolve to the State Legislature. See U.S. Const., Art. II § 1, cl. 2 (“Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors . . .”). This would abrogate the right of millions of Pennsylvanians to select their President and Vice President. Plaintiffs’ requested relief may thus be unconstitutional. See Bush v. Gore, 531 U.S. 98, 110 (2000) (per curiam) (suspending recount because Florida could not devise constitutional recount procedures to conclude vote tabulation before expiration of the federal safe harbor).

In these circumstances the equities and public interest conclusively weigh against granting Plaintiffs’ Motion.

VII. Conclusion

Dr. Stein has repeatedly stated that she has sought a Pennsylvania recount to ensure that every vote counts. Granting her later than last minute request for relief, however, could well ensure that no Pennsylvania vote counts. Such a result would be both outrageous and completely unnecessary; as I have found, suspicion of a “hacked” Pennsylvania election borders on the irrational. Finally, Plaintiffs’ claims for relief suffer from several flaws, each fatal to their Motion. For all these reasons, I will deny that Motion.

An appropriate Order follows.

/s/ Paul S. Diamond

December 12, 2016

Paul S. Diamond, J.